

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,183,788 B2
APPLICATION NO. : 10/788491
DATED : February 27, 2007
INVENTOR(S) : Brian Moore

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

1. In the detailed description of the invention, column 9, line 34, the number "03" has been changed to --D3--, so that the line reads "network of diodes D1, D2, D3, D4 and D5 and capacitors"
2. In the detailed description of the invention, column 10, line 18, the asterisk (*) is used as a sign of multiplication and is in the middle of the line and not superscript, so that the line reads " $n * t_{inv}$ seconds long. The clock signal 90 therefore has a"
3. In the detailed description of the invention, column 10, line 19, the asterisk (*) is used as a sign of multiplication and is in the middle of the line and not superscript, so that the line reads "frequency of $1/(2 * n * \tau_{inv})$ Hz."
4. In the detailed description of the invention, column 10, line 64, the numbers "16" and "17" have been changed to --I6-- and --I7--, so that the line reads "inverters I6 and I7. The number of D flip-flops correlates"
5. In the detailed description of the invention, column 11, lines 23 and 24, the numbers "16" and "17" have been changed to --I6-- and --I7--, so that the lines read "for master reset and startup functionality (i.e. inverters I6 and I7) are included so that a new test can be started as fast"
6. In the detailed description of the invention, column 11, line 26, the numbers "16" and "17" have been changed to --I6-- and --I7--, so that the line reads "inverters I6 and I7 ensure that there is a good square edge"
7. In the detailed description of the invention, column 12, line 29, the asterisk (*) is used as a sign of multiplication and is in the middle of the line and not superscript, so that the line reads " $1/(2 * 3 * \tau_{inv})$. However, if the load 134 on the second inverter"
8. In the detailed description of the invention, column 12, line 52, the asterisk (*) is used as a sign of multiplication and is in the middle of the line and not superscript, so that the line reads "(i.e. gate size). The time constant is therefore $k * R_{lump} * CL1$."
9. In the detailed description of the invention, column 12, line 54, the asterisk (*) is used as a sign of multiplication and is in the middle of the line and not superscript, so that the line reads "becomes $k * R_{lump} * (CL1 + CL2)$ since the capacitors CL1 and"

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10. In the detailed description of the invention, column 12, line 58, the asterisk (*) is used as a sign of multiplication and is in the middle of the line and not superscript, so that equation (2) reads " $f_{osc1}=1/(k*(R_{lump}*CL1))$ "

11. In the detailed description of the invention, column 12, line 60, the asterisk (*) is used as a sign of multiplication and is in the middle of the line and not superscript, so that equation (3) reads " $f_{osc2}=1/(k*(R_{lump}*CL1+ CL2))$ "

12. In the detailed description of the invention, column 13, lines 45 and 46, the numbers "114", "115" and "116" have been changed to --I14--, --I15-- and --I16--, so that the lines read "inverters I14, I15 and I16. In FIG. 18, the inverters I14, I15 and I16 appear disjoint from the variable ring oscillator 62,"

13. In the detailed description of the invention, column 13, line 48, the numbers "114", "115" and "116" have been changed to --I14--, --I15-- and --I16--, so that the line reads "the variable ring oscillator 62, the inverters I14, I15 and I16"

14. In the detailed description of the invention, column 13, lines 50 and 51, the numbers "114", "115" and "116" have been changed to --I14--, --I15-- and --I16--, so that the lines read "sequencer 60 and the outputs of the inverters I14, I15 and I16 are connected to the sub-circuits 152 and 162 at the"

15. In the detailed description of the invention, column 14, line 60, the asterisk (*) is used as a sign of multiplication and is in the middle of the line and not superscript, so that the line reads "ring oscillator 62 is $1/((2*5*)\tau_{inv})$ Hz where τ_{inv} is the delay"

16. In the detailed description of the invention, column 15, line 10, the asterisk (*) is used as a sign of multiplication and is in the middle of the line and not superscript, so that the line reads "oscillator 62 is $1/(k*(R_{lump}*C1))$ Hz (following the guide"

17. In the detailed description of the invention, column 15, line 23, the asterisk (*) is used as a sign of multiplication and is in the middle of the line and not superscript, so that the line reads "variable ring oscillator 62 is $1/(k*(R_{lump}*C2))$ Hz. The"

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18. In the detailed description of the invention, column 15, line 35, the asterisk (*) is used as a sign of multiplication and is in the middle of the line and not superscript, so that equation (4) reads " $f_{osc1}=1/(k*(R_{lump}*CL1))$ "

19. In the detailed description of the invention, column 15, line 36, the asterisk (*) is used as a sign of multiplication and is in the middle of the line and not superscript, so that equation (5) reads " $f_{osc2}=1/(k*(R_{lump}*CL2))$ "

20. In the detailed description of the invention, column 16 line 14, the asterisk (*) is used as a sign of multiplication and is in the middle of the line and not superscript, so that the line reads "variable ring oscillator 62 is $1/(k*R1*C3)$ Hz (following the"

21. In the detailed description of the invention, column 16, lines 33 and 34, the asterisk (*) is used as a sign of multiplication and is in the middle of the line and not superscript, so that the lines read "operation of the variable ring oscillator 62 is $1/(k*(R1+R2)*C4)$ Hz. Therefore, the frequency of oscillation is propor-

22. In the detailed description of the invention, column 16, line 43, the asterisk (*) is used as a sign of multiplication and is in the middle of the line and not superscript, so that equation (7) reads " $f_{osc1}=1/(k*(R1*CL3))$ "

23. In the detailed description of the invention, column 16, line 45, the asterisk (*) is used as a sign of multiplication and is in the middle of the line and not superscript, so that equation (8) reads " $f_{osc2}=1/(k*((R1+R2)*CL4))$ "

24. In the detailed description of the invention, column 16, line 49, the asterisk (*) is used as a sign of multiplication and is in the middle of the line and not superscript, so that equation (9) reads " $f_{osc1}f_{osc2}=((R1+R2)/R1)*(CL4/CL3)$ "

25. In the detailed description of the invention, column 17, line 2, the asterisk (*) is used as a sign of multiplication and is in the middle of the line and not superscript, so that the line reads " $1/(7*\tau_{inv})$ Hz where τ_{inv} is the delay of one of the inverters."

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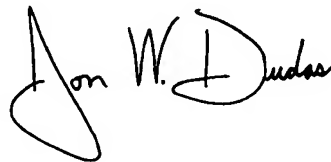
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26. In the detailed description of the invention, column 17, line 9, the asterisk (*) is used as a sign of multiplication and is in the middle of the line and not superscript, so that the line reads "oscillation period τ_5 ($\tau_5=5*\tau_{inv}$) when the variable ring"

27. In the detailed description of the invention, column 17, line 11, the asterisk (*) is used as a sign of multiplication and is in the middle of the line and not superscript, so that the line reads "oscillation period τ_7 ($\tau_7=7*\tau_{inv}$) when the variable ring"

Signed and Sealed this

Twenty-fifth Day of March, 2008

A handwritten signature in black ink, appearing to read "Jon W. Dudas". The signature is stylized with a large, looped initial "J" and a distinct "D".

JON W. DUDAS
Director of the United States Patent and Trademark Office